

REMARKS

Reconsideration is requested.

Claims 2, 8-9, 12-13 and 16 have been canceled, without prejudice. Claims 25-27 have been added and find support, for example, in claims 3-5 as well as throughout the specification. No new matter has been added. The claims have been amended to advance prosecution, without prejudice. Claims 1, 3-7, 10, 11, 14, 15 and 17-27 are pending.

The recitation of a vector in claim 1 above is supported, for example, by paragraph [0017] of the U.S. Patent Office published version of the specification (i.e., U.S. Patent Application Publication No. US 2005/0084928 A1) and is submitted to encompass any contiguous piece of DNA. The recitation of a selectable marker includes the presence of, for example, promoter elements or of IRES elements where construct (a) is polycistronic. The claims are believed to not read on the use of a polycistronic IRES construct containing both an express a coding sequence and a GS gene on a single vector. The applicants submit therefore that the claims are not suggested by and are further distinguished from the cited Pu et al (Molecular Biotechnology 1998, Vol. 10, pp 17-25).

The Section 103 rejections of claims 1, 3-8, 10-13, 16 and 19-24 over WO 99/05267 (Brandt) in view of Pu et al (Molecular Biotechnology 1998, Vol. 10, pp 17-25), and claims 1, 3-8, 10-13, 16 and 19-24 over Brandt (U.S. Patent No. 6,395,484), in view of Pu et al (Molecular Biotechnology 1998, Vol. 10, pp 17-25), and claims 1, 7-8 and 13-18 over Brandt (WO 99/05267) in view of Pu et al and Hermentin (U.S. Patent No.

6,096,555), are traversed. Reconsideration and withdrawal of the rejections are requested in view of the above and the following further comments.

The claimed invention is related to the circumstance where a selectable marker other than GS already had been chosen and was present in cells, but a problem with insufficient sialylation was encountered. Surprisingly, supertransfection with a GS marker helped to overcome the sialylation deficiency. Accordingly, at the time of the GS transfection, all the cloning and clone selection art cited by the Examiner had been accomplished. The ordinarily skilled person encountered however the more specific problem of insufficient glycosylation. EPO in particular has been found to have multiple N-glycans and to be highly dependent in its specific activity on sialylation.

The cited art does not address the problem of sialylation and introducing GS activity into a cell. More specifically, the ordinarily skill person would not have been motivated by the cited art to have made the claimed invention, such as by combining by way of supertransfection a GS reference with a reference on EPO production by means of DHFR.

The ordinarily skilled artisan may have expected more rapid cloning or clonal selection however one of ordinary skill would not have expected to have successfully made the claimed invention from the cited art. Moreover, gene amplification with a second selectable marker would not have addressed the problem of enhancing sialylation, and hence specific activity of a glycosylated gene product, as with the claimed invention.

The cited art is silent with regard to sialylation enhancement using GS. The applicants believe that perhaps the art has failed to appreciate same because proteins

previously produced by GS were not dependent in their activity on complete sialylation (i.e., some glycosylation with core glycan was sufficient for activity). With the use of human cell lines potentially capable of sialylation however the enhancement of sialylation has become more important. The applicants believe that the CHO cells of Pu et al, for example, do not have a human-like sialylation capacity such that there would not have been incentive in the art to have combined the cited art with Pu et al. to allegedly make the claimed invention.

Finally, the applicants note that the medium condition is relevant to the amount of stress placed on cells wherein serum-free conditions have become preferred for avoiding potential disease transmission however these conditions can increase stress.

The claims are submitted to be patentable over the cited art and withdrawal of the Section 103 rejections are requested.

The claims are submitted to be in condition for allowance and a Notice to that effect is requested. The Examiner is requested to contact the undersigned in the event anything further is required in this regard.

Respectfully submitted,

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